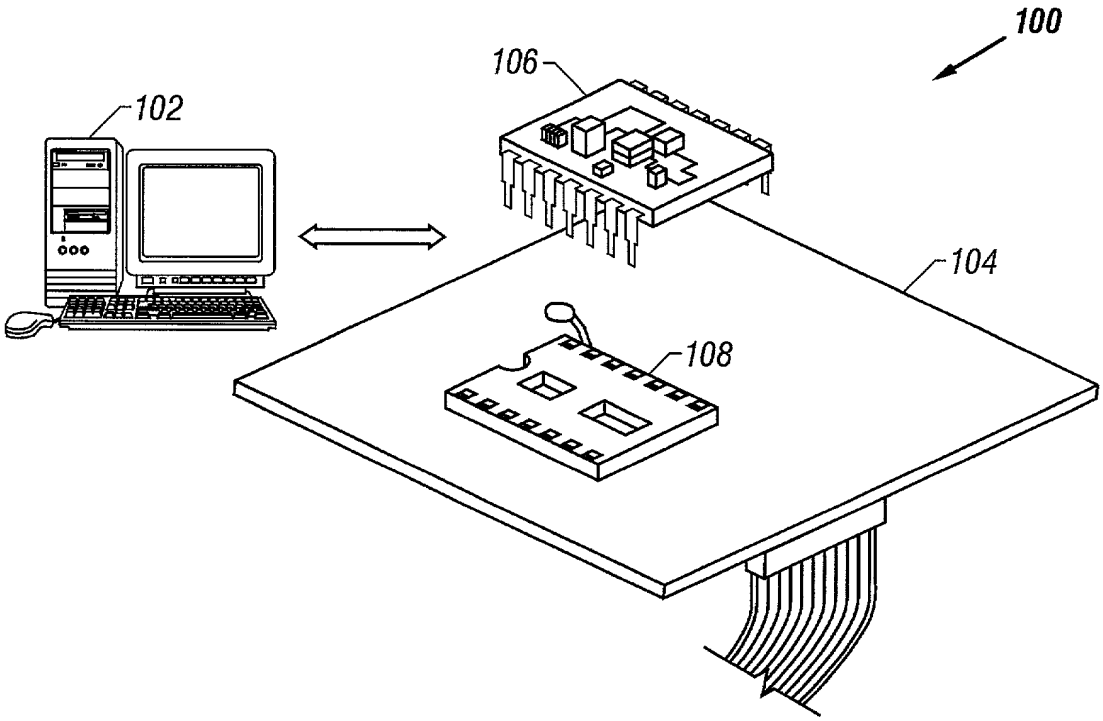

100
106
102
104
108

FIG. 1

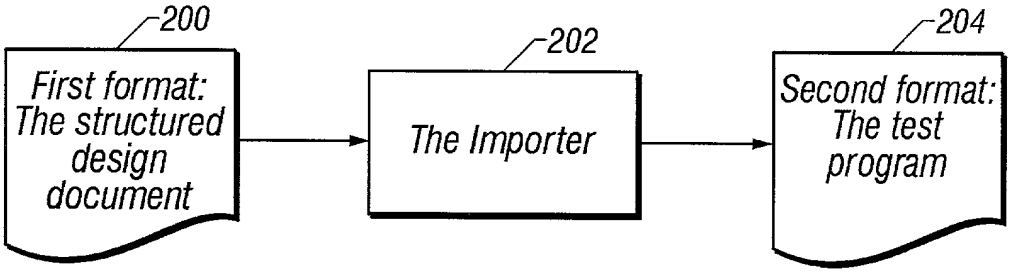

200
First format: The structured design document
202
The Importer
204
Second format: The test program

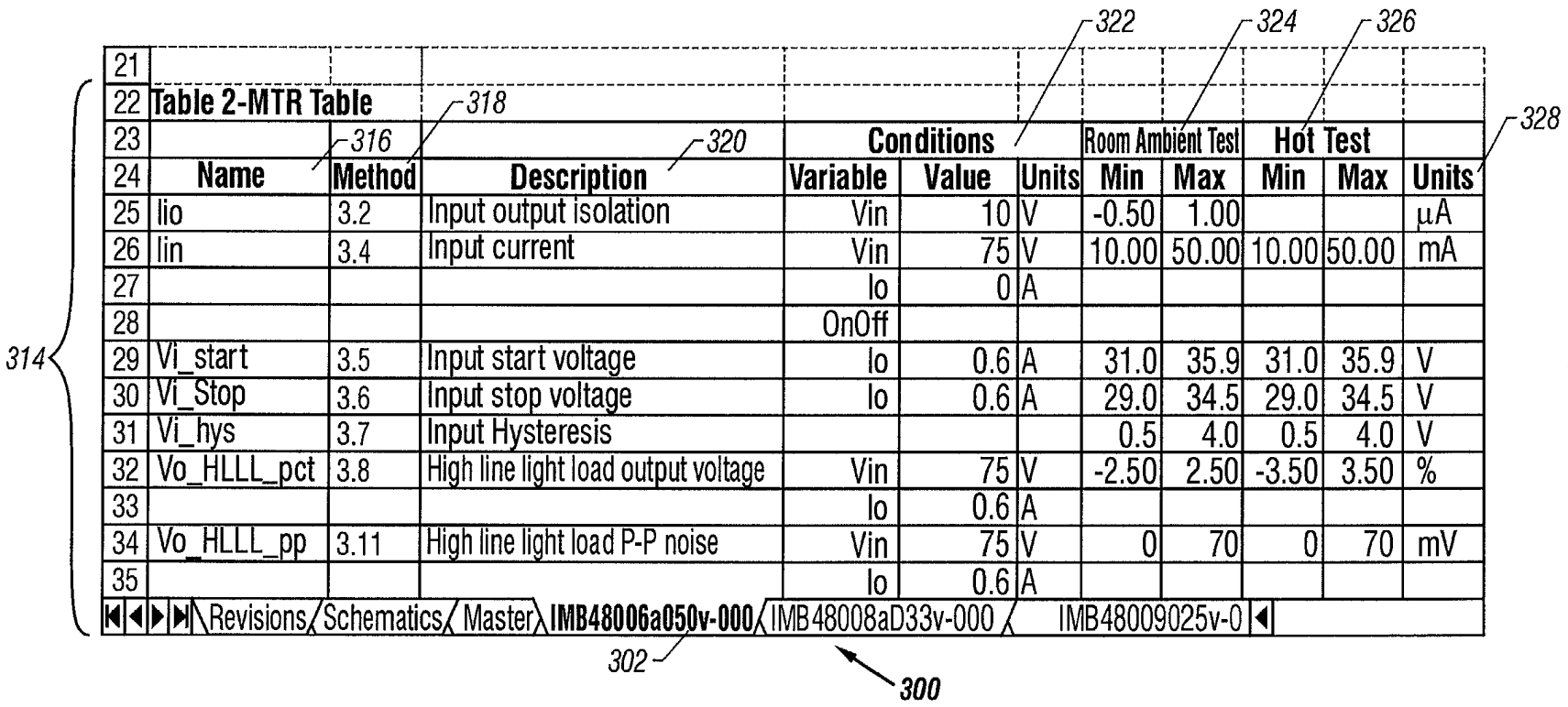
FIG. 2

306 308 310 312

	A	B	C	D	E	F	G	H	I	J	K
2	Table 1 - Fundamental characteristics of product in platform										
3	**Value**	**Units**	**Description**	**Name**					301		
4	1		Number of outputs	NumberofOutputs							
5	5	V	Out1 nominal output voltage	Vo_nom							
6	2.5	%	Out1 room ambient voltage tolerance	Tolerance_ra							
7	3.5	%	Out1 voltage hot test tolerance	Tolerance_ht							
8	6	A	Out1 full load current	Io_FL							
9	0.6	A	Out1 minimum load current	Io_min							
10	36	V	Low line input voltage	Vi_LL							
11	48	V	Nominal line input voltage	Vi_NL							
12	75	V	High line input voltage	Vi_HL							
13	2		Number of on/off pins	NumberOfOnOffPins							
14	1		Module state with OnOff; 0,0	OnOff_0_0							
15	1		Module state with OnOff; 0,1	OnOff_0_1							
16	0		Module state with OnOff; 1,0	OnOff_1_0							
17	1		Module state with OnOff; 1,1	OnOff_1_1							
18	1		Number of trim pins	NumberofTrimPins							
19	-0.023		Trim slope	Slope_tp1							
20	1.225		Trim intercept	Intercept_tp1							

304

FIG. 3A



21												
22	**Table 2-MTR Table**											
23				**Conditions**			**Room Ambient Test**		**Hot Test**			
24	**Name**	**Method**	**Description**	**Variable**	**Value**	**Units**	**Min**	**Max**	**Min**	**Max**	**Units**
25	Iio	3.2	Input output isolation	Vin	10	V	-0.50	1.00			µA
26	Iin	3.4	Input current	Vin	75	V	10.00	50.00	10.00	50.00	mA
27				Io	0	A					
28				OnOff							
29	Vi_start	3.5	Input start voltage	Io	0.6	A	31.0	35.9	31.0	35.9	V
30	Vi_Stop	3.6	Input stop voltage	Io	0.6	A	29.0	34.5	29.0	34.5	V
31	Vi_hys	3.7	Input Hysteresis				0.5	4.0	0.5	4.0	V
32	Vo_HLLL_pct	3.8	High line light load output voltage	Vin	75	V	-2.50	2.50	-3.50	3.50	%
33				Io	0.6	A					
34	Vo_HLLL_pp	3.11	High line light load P-P noise	Vin	75	V	0	70	0	70	mV
35				Io	0.6	A					

Revisions / Schematics / Master / **IMB48006a050v-000** / IMB48008aD33v-000 / IMB48009025v-0

FIG. 3B

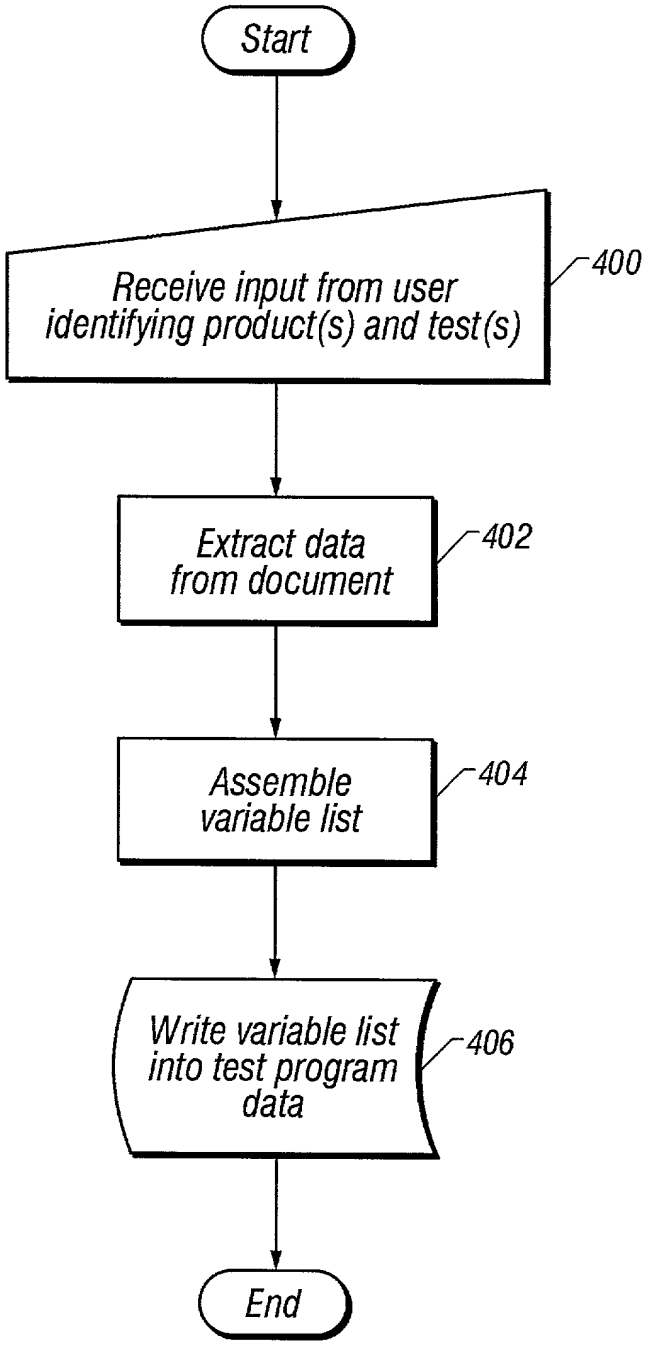

Start
Receive input from user identifying product(s) and test(s)
400
Extract data from document
402
Assemble variable list
404
Write variable list into test program data
406
End

FIG. 4

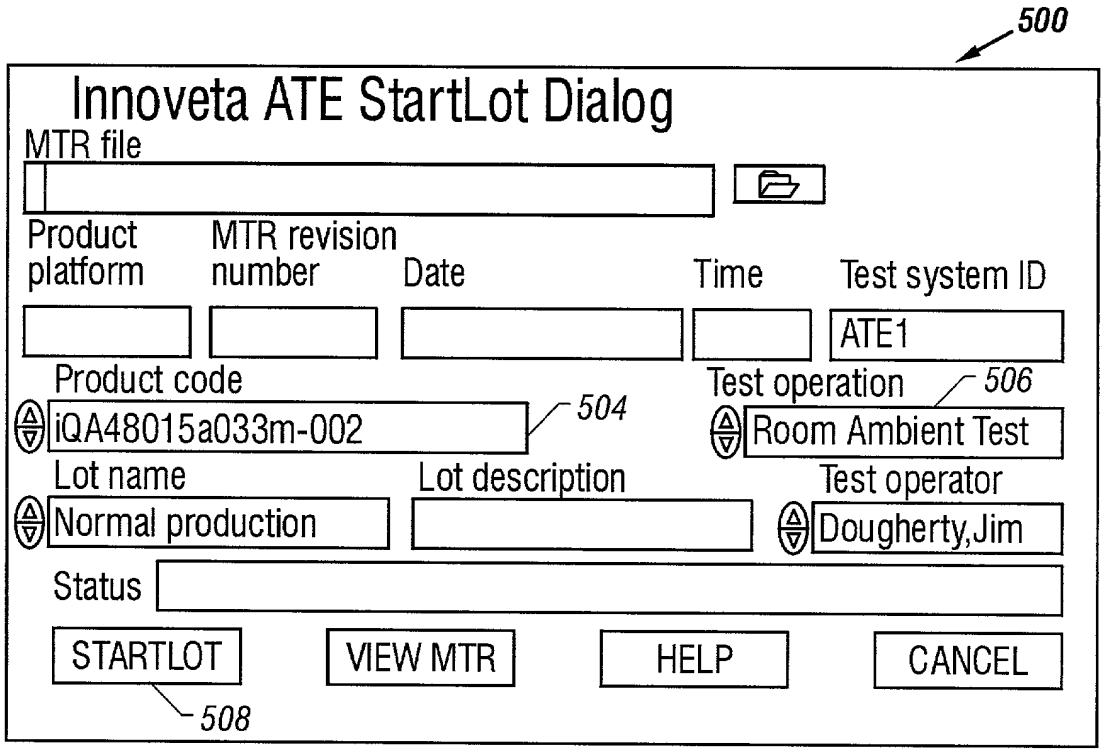

500
Innoveta ATE StartLot Dialog
MTR file
Product platform
MTR revision number
Date
Time
Test system ID
ATE1
Product code
iQA48015a033m-002
504
Test operation
506
Room Ambient Test
Lot name
Normal production
Lot description
Test operator
Dougherty,Jim
Status
STARTLOT
VIEW MTR
HELP
CANCEL
508

FIG. 5

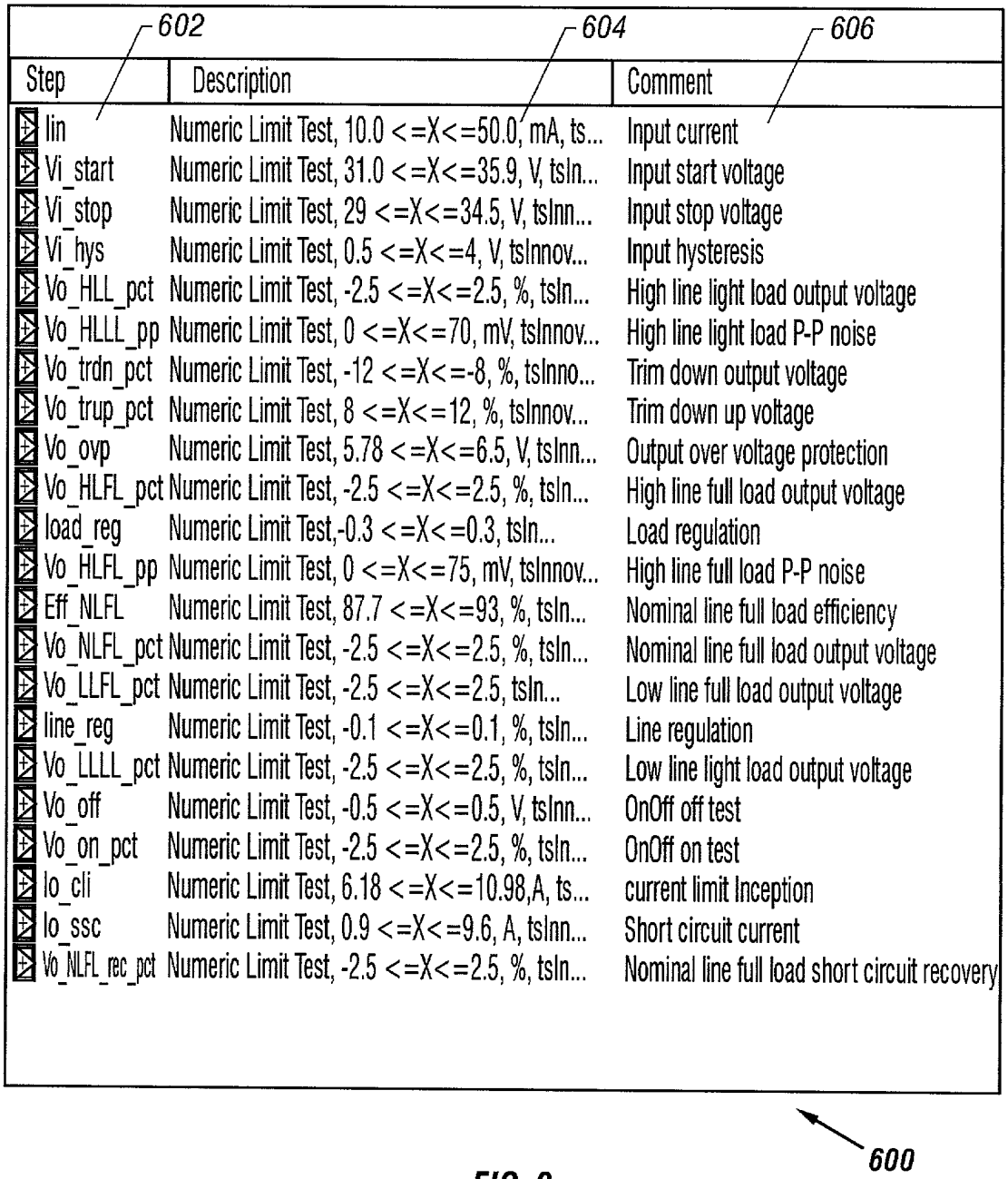

602
604
606
Step
Description
Comment
lin
Numeric Limit Test, 10.0 <=X<=50.0, mA, ts...
Input current
Vi_start
Numeric Limit Test, 31.0 <=X<=35.9, V, tsIn...
Input start voltage
Vi_stop
Numeric Limit Test, 29 <=X<=34.5, V, tsInn...
Input stop voltage
Vi_hys
Numeric Limit Test, 0.5 <=X<=4, V, tsInnov...
Input hysteresis
Vo_HLL_pct
Numeric Limit Test, -2.5 <=X<=2.5, %, tsIn...
High line light load output voltage
Vo_HLLL_pp
Numeric Limit Test, 0 <=X<=70, mV, tsInnov...
High line light load P-P noise
Vo_trdn_pct
Numeric Limit Test, -12 <=X<=-8, %, tsInno...
Trim down output voltage
Vo_trup_pct
Numeric Limit Test, 8 <=X<=12, %, tsInnov...
Trim down up voltage
Vo_ovp
Numeric Limit Test, 5.78 <=X<=6.5, V, tsInn...
Output over voltage protection
Vo_HLFL_pct
Numeric Limit Test, -2.5 <=X<=2.5, %, tsIn...
High line full load output voltage
load_reg
Numeric Limit Test,-0.3 <=X<=0.3, tsIn...
Load regulation
Vo_HLFL_pp
Numeric Limit Test, 0 <=X<=75, mV, tsInnov...
High line full load P-P noise
Eff_NLFL
Numeric Limit Test, 87.7 <=X<=93, %, tsIn...
Nominal line full load efficiency
Vo_NLFL_pct
Numeric Limit Test, -2.5 <=X<=2.5, %, tsIn...
Nominal line full load output voltage
Vo_LLFL_pct
Numeric Limit Test, -2.5 <=X<=2.5, tsIn...
Low line full load output voltage
line_reg
Numeric Limit Test, -0.1 <=X<=0.1, %, tsIn...
Line regulation
Vo_LLLL_pct
Numeric Limit Test, -2.5 <=X<=2.5, %, tsIn...
Low line light load output voltage
Vo_off
Numeric Limit Test, -0.5 <=X<=0.5, V, tsInn...
OnOff off test
Vo_on_pct
Numeric Limit Test, -2.5 <=X<=2.5, %, tsIn...
OnOff on test
Io_cli
Numeric Limit Test, 6.18 <=X<=10.98,A, ts...
current limit Inception
Io_ssc
Numeric Limit Test, 0.9 <=X<=9.6, A, tsInn...
Short circuit current
Vo_NLFL_rec_pct
Numeric Limit Test, -2.5 <=X<=2.5, %, tsIn...
Nominal line full load short circuit recovery
600

FIG. 6

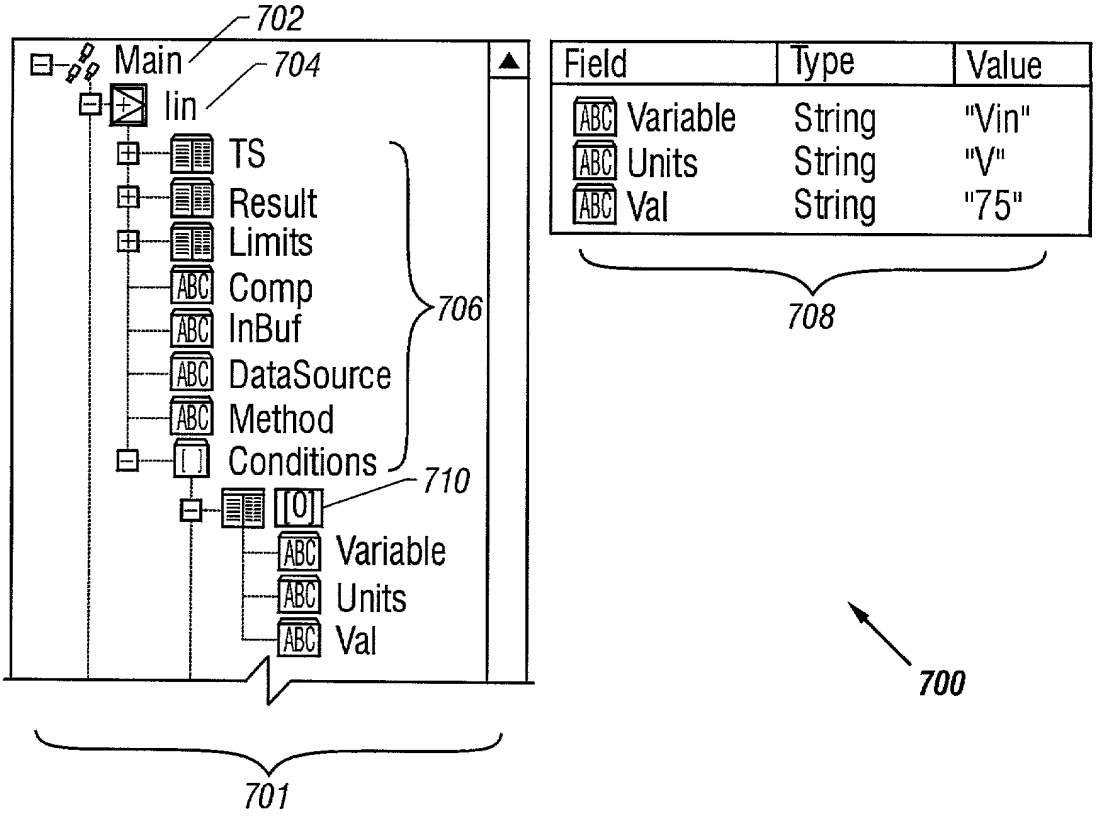

Main
lin
TS
Result
Limits
Comp
InBuf
DataSource
Method
Conditions
[0]
Variable
Units
Val
702
704
706
710
701
Field
Type
Value
Variable
String
"Vin"
Units
String
"V"
Val
String
"75"
708
700

FIG. 7

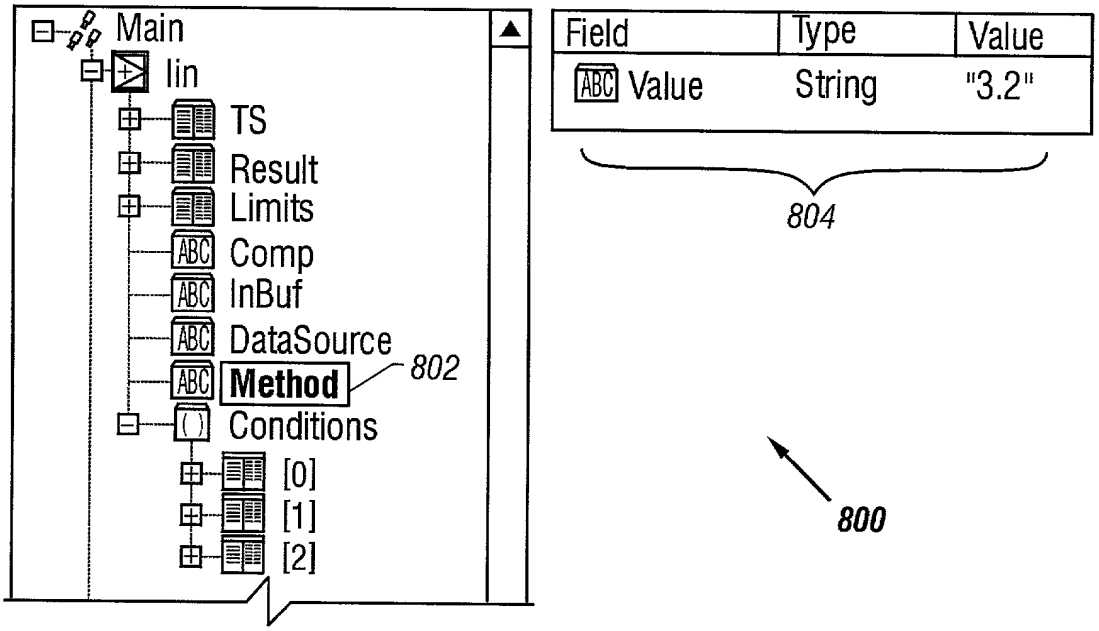

Main
lin
TS
Result
Limits
Comp
InBuf
DataSource
Method
Conditions
[0]
[1]
[2]
802
Field
Type
Value
Value
String
"3.2"
804
800

FIG. 8

Variable	Type	Value
ABC ProductCode	String	"iMB48006a050v-000"
ABC TestOperation	String	""
123 NumberOfOutputs	Number	1
[] Vo_nom	Array of Numbers[0...	...
123 Tolerance_ra	Number	2.5
123 Tolerance_ht	Number	3.5
[] Io_FL	Array of Numbers[0...	...
123 Vi_LL	Number	36
123 Vi_NL	Number	48
123 Vi_HL	Number	75
123 NumberOfOnOffPins	Number	2
123 OnOff_0_0	Number	1
123 OnOff_0_1	Number	1
123 OnOff_1_0	Number	0
123 OnOff_1_1	Number	1
123 Slope_tp1	Number	-0.023
123 Intercept_tp1	Number	1.225

900

FIG. 9

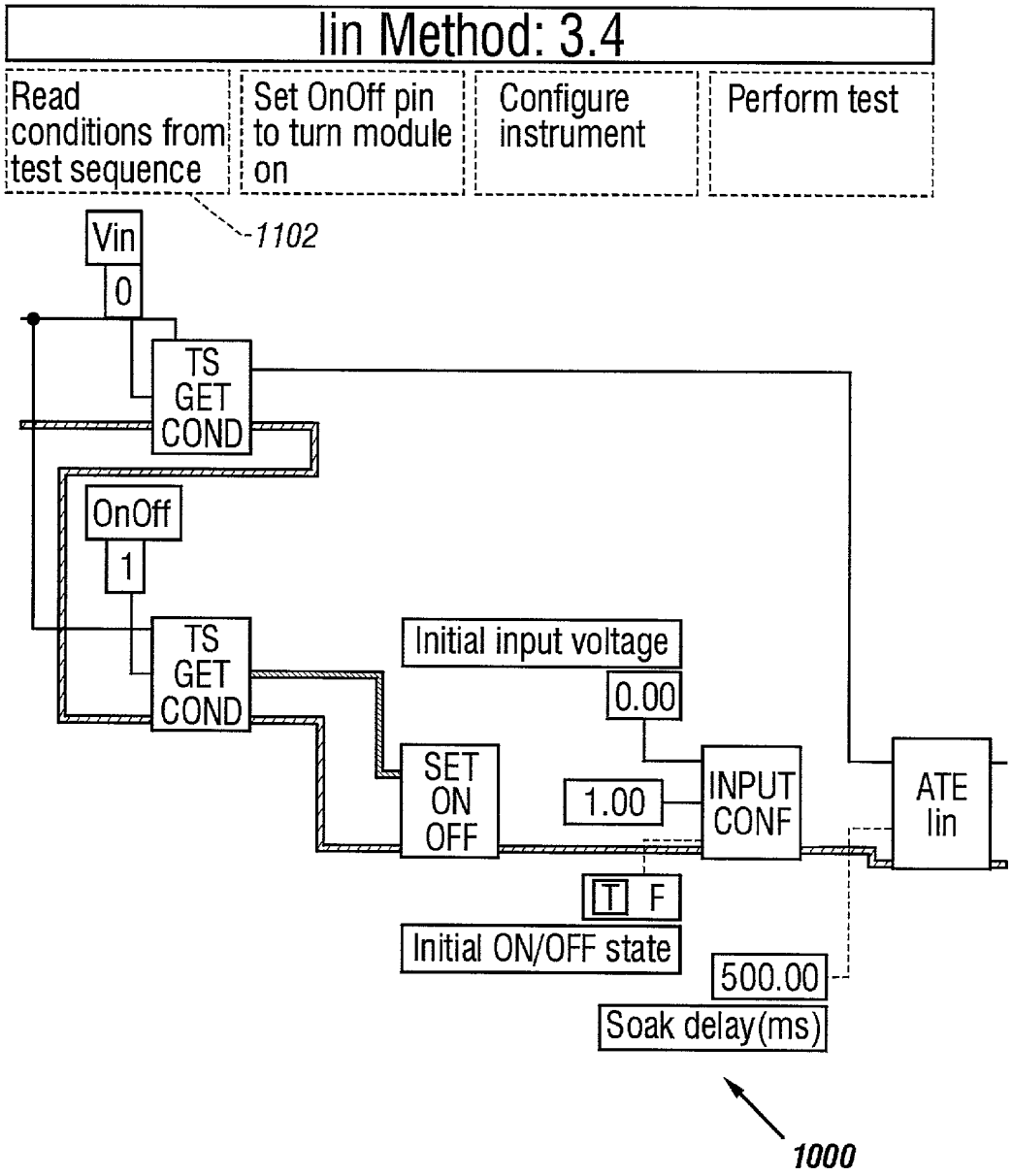

lin Method: 3.4
Read conditions from test sequence
Set OnOff pin to turn module on
Configure instrument
Perform test
1102
Vin
0
TS GET COND
OnOff
1
TS GET COND
Initial input voltage
0.00
SET ON OFF
1.00
INPUT CONF
ATE lin
T F
Initial ON/OFF state
500.00
Soak delay(ms)
1000

FIG. 10

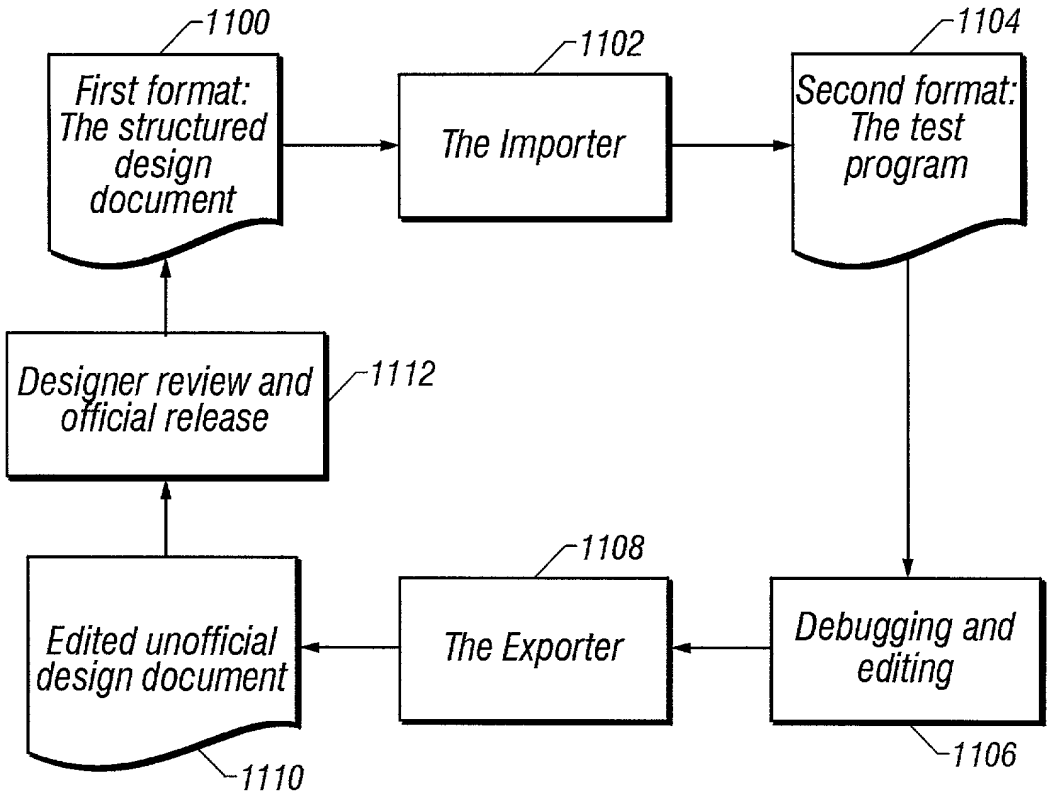

1100
First format: The structured design document
1102
The Importer
1104
Second format: The test program
Designer review and official release
1112
1108
Edited unofficial design document
The Exporter
Debugging and editing
1110
1106

FIG. 11